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THE EXCAVATIONS AT EL RITO DE LOS FRIJOLES IN 1909

By EDGAR L. HEWETT

IN the account of the excavations at Tyuonyi in 1908,¹ a general view was presented of the archeology of the valley known as El Rito de los Frijoles (see map, fig. 106). A brief report of the continuation of that work in 1909 will now be given.

THE EXCAVATION OF THE "SUN HOUSE"

The work of the past season commenced with the excavation of the talus houses, on the slope just north of the great community house, heretofore designated by us as Group E.² Excavation disclosed the fact that this group consisted of two distinct villages. The first of these occupies the eastern portion of Section E and lies at a much lower level than the western part. The whole of it is plainly shown in the panoramic view in the paper above referred to. It lies just back of the great community house and is reached by a trail which passes up a ravine to a landing at the west end of the terrace on which the house was built. From the same landing a stairway trail to the left leads up to higher levels, back of the group of conical rocks known as "The Needles," to the second village group excavated by us this year and named the "Snake House."

The Sun House was so named on account of the prevalence of the sun symbol on the face of the cliff above it. This symbol consists usually of an etching of concentric circles and in most cases appears to have been painted red. The roughly crescent-shaped terrace on which the house stood is 150 feet long; its width varies from 10 to 50 feet. The western half of the terrace is only wide enough for a walk in front of the house, but the eastern half widens to a broader ledge which formed a small plaza. This plaza terrace

¹ *American Anthropologist*, vol. XI, no. 3, 1909.

² See maps, plans, and photographs in the report cited, being *Papers of the School of American Archaeology*, no. 5.

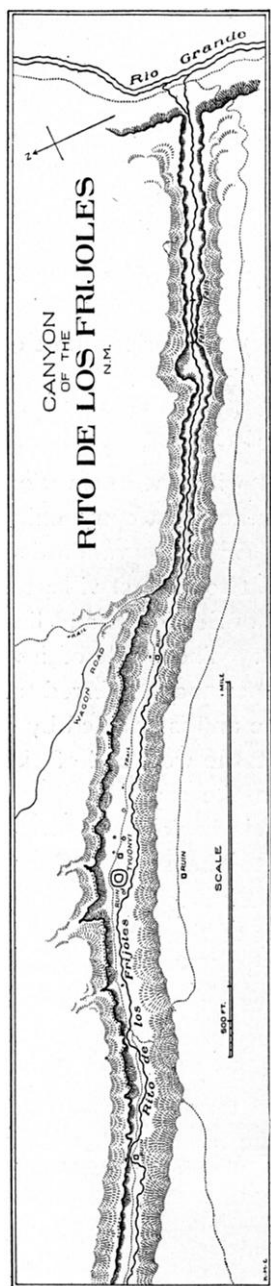


FIG. 106.

is about four feet higher than the level of the walk (see plan, fig. 109). Both terraces are supported by retaining walls of unshaped tufa blocks.

The appearance of the ledge at the beginning of the work is shown in figure 107. Previous to excavation, no house walls were visible above the talus. This is one of the problems in the study of the talus towns. The condition of ruins in the valley, or on the open mesas, is easily explained. Houses several stories high may crumble to the earth, and the natural drift of soil, atmospheric deposit, climatic action, and the advance of vegetation, may convert the site in the course of a few centuries to grass-grown mounds. But, with the talus houses, there is the shelter of the cliff rising in some cases to hundreds of feet above the ruins. In some instances there have been slides of heavy rock masses from above, detached by natural weathering, or perhaps seismic disturbances, to cover the buildings. But usually the mass which constitutes the talus ruins consists of only the débris of their own walls, covered with the detritus of natural disintegration of the cliffs, and atmospheric deposits, varying with the situation of the ruin with respect to shelter. There is too a considerable wash of soil from the talus slopes, tending to keep down the amount of accumulation. Yet, buildings from one to four

stories high have crumbled into the talus slopes, and have been so smoothed off that all appearance of ruined walls is wanting until laid bare by the spade. While these are conditions that do not, as yet, afford any accurate basis for estimate, they must be given due weight in any consideration of the time element in this culture.

The Sun House is the smallest of the talus villages that have been cleared. Before excavation, eleven cave rooms were visible at varying levels above the talus (see fig. 107, and fig. 109, rooms 1

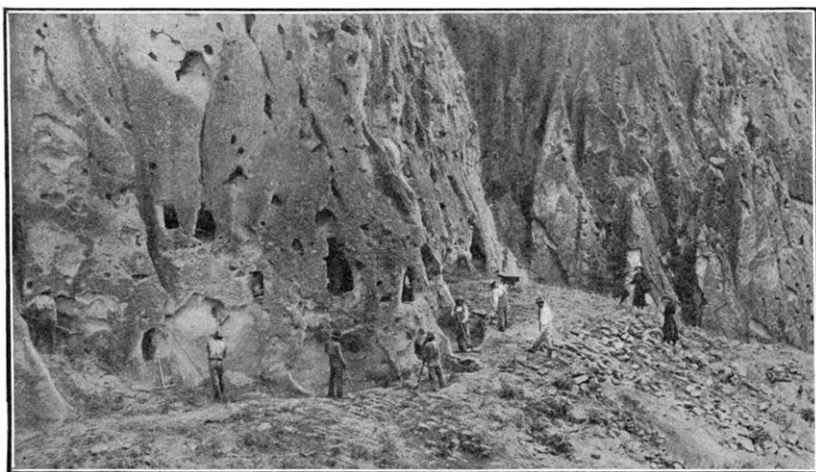


FIG. 107. — The Sun House — Beginning of excavations.

to 10). These were for the greater part back chambers of the house built against the cliff. They were nearly all on second or third floor levels.

Excavation laid bare all rooms shown on the ground-plan from *A* to *P* inclusive. These are also on different levels. Rooms *A* to *K* are in alcove form; they were mostly first and second floor back rooms, made by excavating the base of the cliff, the front of the rooms and in some cases part of the sides being house walls of masonry. These alcove rooms were not always on exactly the same level as the constructed rooms in front. The rooms from *L* to *P* were built entirely in front of the face of the cliff. It is probable that these had no superimposed stories and that all the alcove rooms, *A* to *K*, had.

We thus have a total of twenty-eight rooms, exclusive of small alcoves and niches, such as are to be seen off 4, 6, *E*, *F*, and in the cliff wall between 9 and 10, figure 109. The original number of exterior rooms cannot now be determined. Owing to the irregularity of the cliff, the complete plan of construction cannot be traced. But it would be safe to estimate that the Sun House when occupied comprised from forty to fifty rooms of all classes; that is, cave rooms, those entirely enclosed in the natural rock walls; alcove rooms, those partly enclosed in cliff walls; exterior rooms, or those enclosed either wholly or in part by walls of masonry. Among the exterior rooms were doubtless some having only half walls separating one from another, some being nothing more than open porches. The following table of dimensions and relative positions may assist in an understanding of the building (see ground-plan, fig. 109).

No. of room on plan.	Size.	Height.	Position.
1	5' 9" × 7' 6"	4' 6"	6' above <i>A</i>
2	6' 6" × 9'	6'	9' " <i>K</i>
	(K is 7' above <i>B</i>)		
3	7' × 7'	5'	12' " <i>C</i>
4	7' × 5' 6"	5'	7' 6" " <i>E</i>
4 <i>a</i>	5' 6" × 8'	5'	7' 3" " <i>D</i>
5	Not determinable		1' 6" " 4
6	6' × 6'	5'	12' " <i>G</i> , 3d story
7	6' × 8'	4' 3"	6' " <i>H</i>
8	5' × 5'	4'	6' 6" " <i>I</i>
9	6' × 10'	5' 6"	7' " <i>J</i>
10	6' × 8' 6"	4'	5' " Terrace, on level with <i>J</i> .

3 is much higher than 4*a*. The apparent connection is misleading.

Some of the rooms have the usual appurtenances of domestic life, such as fireplaces, niches, and storage alcoves. The cultural remains recovered consist of articles of stone, bone, wood, and clay. A special paper will be devoted later to a description of material found in the excavations for both 1908 and 1909. All rooms present the usual appearance of living rooms with the exception of *B*.

This room, about 8 by 8 feet in dimension, was almost subterranean. It was sunk in the rock ledge a considerable depth below the surrounding rooms and had the appearance of having been the clan kiva. It is the one in which the lower ladder rests in figure 108. The upper part of the wall was probably completed by a few courses of masonry, giving the room a depth of from 7 to 8 feet. The floor of room *K*, above and back of *B*, was only a step above the roof of the latter. *K* was an alcove room, three sides formed by the cliff wall, with probably an open or half-walled front. Above *K* was room 2, its floor about at the roof level of *K*. It could have been entered from



FIG. 108.—The Sun House, after excavation.

the roof, or by means of a ladder through the roof of *K*. A porch may have been built in front of 2 on the roof of *K*. Room 2 is equipped, as *K* and *B* are not, with fireplace, niches, and storage alcove. It was evidently the main living room of the group.

We have here an interesting assemblage of rooms. At the bottom, a kiva, adequate only for the use of a small clan. Above this, an open room, the clearing of which yielded some objects of a

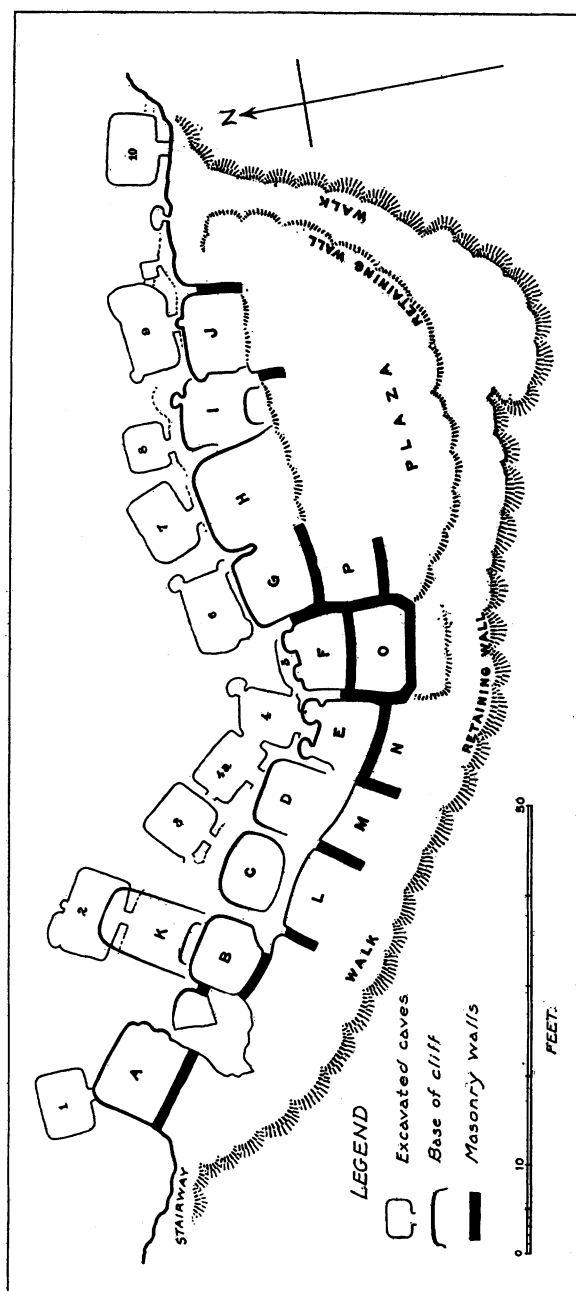


Fig. 109. — Plan of the Sun House.

ceremonial character, as some fine specimens of ringing stones which, when tapped with stones of the same kind, give out a clear metallic sound that can be heard at a considerable distance. These stones, suspended from the roof by strings of deer-skin, were used by the priest to call the men to the kiva. The writer found this same device in use in one of the kivas at Taos in 1896. Above this the necessary living

room or rooms completed the dwelling, which, from the arrangement with respect to the kiva, and the ceremonial material found there, I have called the House of the Priest. Arrangements not unlike this are to be found among the Pueblos at the present time.

THE EXCAVATIONS OF THE SNAKE VILLAGE

From the landing at the base of the cliff from which the stairway turns to the right to ascend to the Sun House, another stairway turns up to the left to the western section of group E, which,



FIG. 110. — The lower or right-hand section of the Snake Village.

after clearing, we named the House or Village of the Snake People. The cliff is here so irregular that no plan of the village is possible. The line where the talus meets the wall rises steeply from the common landing between the two villages, with ruins of cave houses all along (figs. 110, 111), until the apex is reached, about two hundred feet to the west. The chambers at the top are at least sixty feet higher than those nearest the landing. The highest rooms are those at which the upper ladder is seen in figure 111. From here the slope breaks away precipitously to the left for a distance of about two

hundred feet, which can be passed only by means of long ladders and stone stairways. No cave rooms exist along this line of cliff base, but the foot of the trail terminates at a landing about eighty feet lower down, directly in front of the largest cave kiva that has been found. This is not now considered a part of the Snake House group, and will be described separately.

The slope from the Snake House to the valley is so broken and precipitous that almost no talus exists there. Only at the point shown in figure 110 is there any ledge upon which rooms could be built exterior to the cliff. Here were outside rooms partly cut from

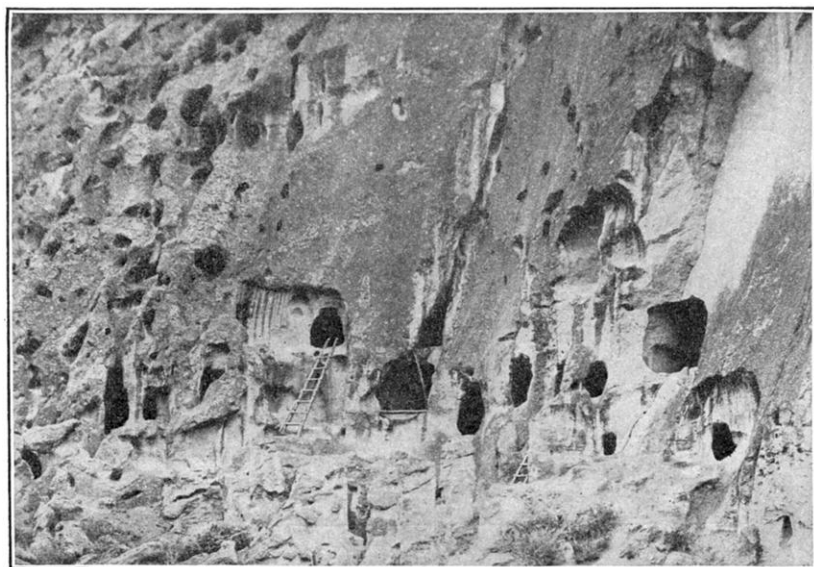


FIG. 111. — The upper or left-hand section of the Snake Village.

the rock and in part built with artificial walls. There is room only for a rock stairway leading to the upper section shown in figure 111. Such is the ruggedness that only open porches could have been built in front of the cliff chambers at this level. As there is but little to tell about this part of the Snake House group, it will be finished at this point.

All the cave rooms were cleared and ladders constructed, both

inside and out, so as to make them accessible. They are at different levels, and at some places two-story verandahs have existed in front. All the rooms between the two ladders shown in figure 111 have interior connection. There are seven in the series. The passage-

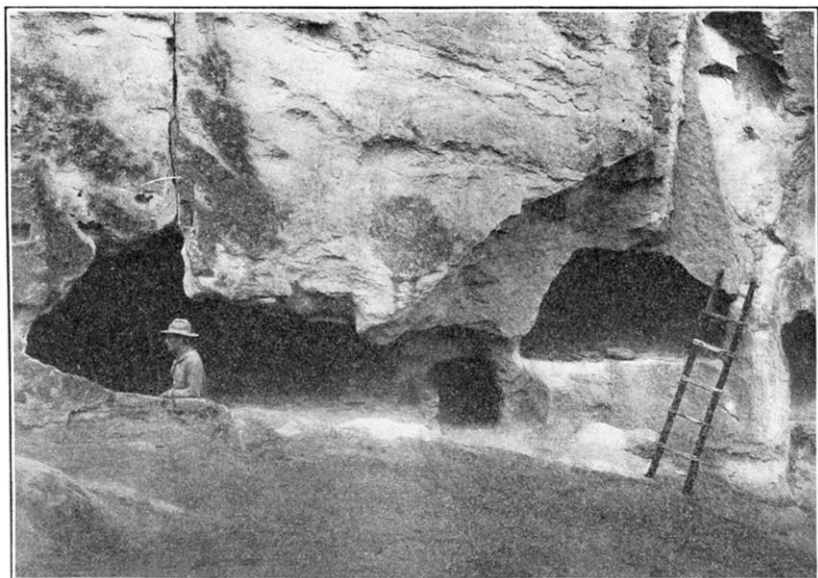


FIG. 112. — The Snake kiva.

ways in front were excavated, and from the highest rooms one looks down upon a singular foreground. The slope has been sculptured by wind erosion into a grotesque group of cones and cylinders. Some of the conical masses (Tewa: *ndundungi*, "tent rocks") are of great size. From the valley below the entire village is almost hidden from view by them. Directly in front of the section where the ladders are seen (fig. 111) is a circle of cylindrical columns enclosing one central shaft. There is some appearance of artificial shaping here, and the place strongly suggests use as a shrine. Such a freak of nature could not fail to impress the Indian mind with superstitious awe.

The upper section of the group is interesting mainly for its unique situation. The lower section affords much more that is

instructive. The central feature of the group is the Snake kiva. Its position is shown in figure 110. It will be better understood by reference to figure 112. This is of the class that we have named "cave kivas," it having been enclosed entirely within the walls of the cliff. A considerable part of the front has fallen away. Vestiges remain of the main entrance, which was at about the center of the southern side. To the right of this are to be seen traces of the ceremonial opening which exists in all the ancient kivas of the Pajarito plateau. The shape of the room is that of an irregular oblong (see plan, fig. 113). Upon the floor plan will be noticed

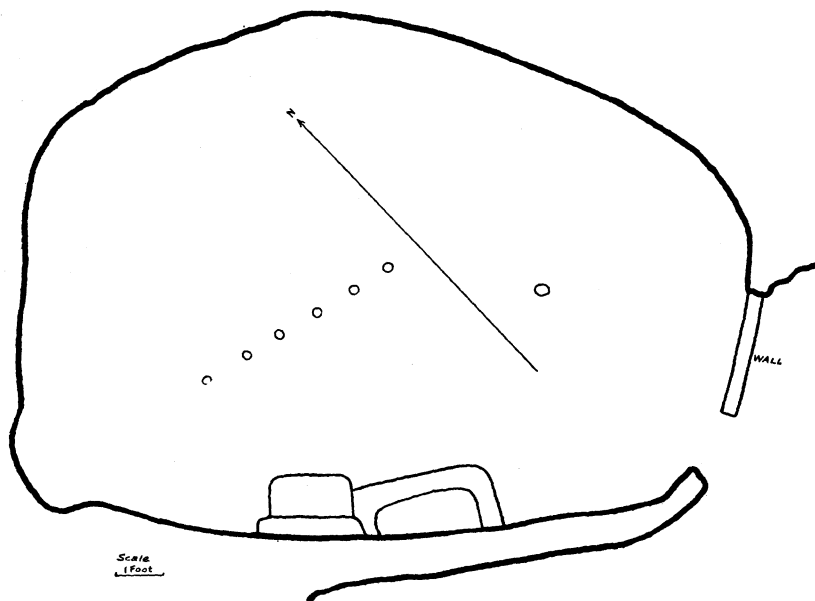


FIG. 113. — Ground-plan of Snake kiva.

a row of holes, a feature to be found in the floor of nearly every kiva that has been examined in this region. These holes vary from 3 to 5 inches in diameter and from 6 to 12 inches in depth. They are placed in a straight line at a distance apart which varies but slightly in the different kivas that have been excavated. This distance will average about 12 inches. The number of holes is always six or seven. In this kiva there is but a single row. In a

number of others there are two rows forming an angle the degree of which is variable (figs. 115, 116). In a number of cases these holes have been found partially filled with adobe mortar. In some this filling has been found intact, and set into it deeply and firmly, so as to be removed only with difficulty, is a loop of willow or other tough flexible wood. These loops extend but very little above the surface of the floor. In another paper, one on the excavations at Puye, will be shown a view of a floor in which the row of loops remains undisturbed. Their function is unknown to us, and at present no theory is proposed as to their use. It is not to be understood that these rows of holes in the floors of Pajaritan kivas were in all cases filled with mortar and held the loops of willow as above described. It is almost certain that in some instances where two such rows existed in the same floor one of them contained pegs or small posts which appear to have had some ceremonial use. Another hole, isolated from those in the rows, is found in the floor of nearly every kiva (figs. 113, 115). In this a post was set. It always occupies a certain position with reference to the ceremonial opening in the kiva wall through which the sun's rays, entering and falling upon the post, produced a shadow which served to mark certain important divisions of time. The use of this sun mark in the kiva is yet to be worked out in detail. That it had such a function I have been informed by a trusted Tewa who occupies a position of priestly character in the village of Santa Clara.

The walls of the kiva are covered with a dense coating of smoke which partially obscures the mural decorations. A dado painted in red to a height of about 40 inches extends around the entire interior wall. Above this was a frieze, about twelve inches wide, in which there is to be seen rather dimly a painting of the great "Plumed Serpent," which is the feature upon which this has been identified as a Snake kiva. The entire painting is now so thoroughly blackened that its original color cannot be ascertained.

There are other facts which aid in the identification of this as a Snake kiva. Small etchings of the Plumed Serpent are found under the successive washings of color upon the wall. In the small alcove seen in the photograph (fig. 112), just to the right of the kiva, a very interesting deposit of ceremonial objects was found.

No final study of this material has yet been made, but among the specimens recovered are numerous fragments of what has been identified as the framework upon which was constructed the "Magic Snake" used by the priests in connection with certain occult ceremonies as at present among the Hopi. From the various evidences found we conclude that here again in the group of rooms adjacent to the kiva we have the dwelling of the priest who had charge of the rites of this sanctuary.

Some distance above and to the left of the kiva, in a small alcove, was found the best specimen that has been recovered illustrating the mode of burial here practised (fig. 114). On the floor of

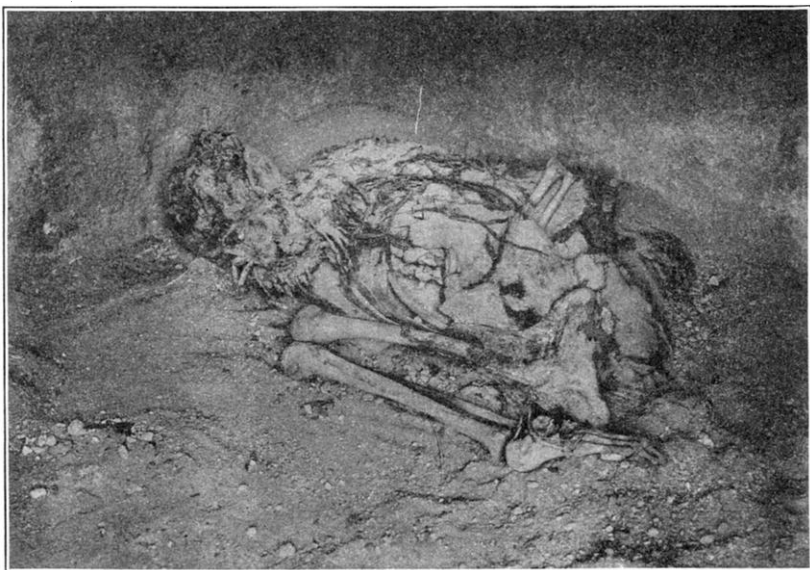


FIG. 114. — Cave burial, Rito de los Frijoles.

the cave, and covered to a depth of about two feet in the volcanic ash, was found the desiccated remains of an individual that had probably just about reached the age of maturity. The body was placed upon the face, with the head in a westwardly direction, and folded in the position to which we have heretofore referred as the "embryonic position," that is, with the knees drawn up against the

chest in the position of birth. The skeleton was almost completely articulated. The body was first wrapped in a white cotton garment, which was probably the dress worn during life. It is of firm texture and excellent weave, and large portions are found in a good state of preservation. The outer wrapping of the body was a robe of otter or beaver fur. The final identification of this material has not yet been made. The robe was made by first twisting a small rope of yucca fiber about an eighth of an inch in diameter; then with the shredded fiber of the eagle or turkey feather, the fur was bound upon the cord, producing a fur rope of about a quarter of an inch in diameter which was then woven into a robe with very open mesh. It seems probable that this was the customary mode of wrapping the dead, but as the majority of interments were in cemeteries in the open, the wrappings are for the greater part decayed. Many fragments have been recovered in connection with the cemetery burials, but not until the crypt burials of the talus villages were discovered was the material found in good state of preservation. The significance of this mode of burial is discussed in detail in a paper on the excavations at Puye to follow this immediately.

THE LARGE CAVE KIVA

The situation of this sanctuary (fig. 115) was mentioned above. As it is not embraced within the bounds of any village, but stands completely isolated, it has been conjectured that it was designed for tribal rather than for clan use. It is almost circular in form, and entirely enclosed within the walls of the cliff. Of such size is it that our entire force of Indian workmen, numbering as many as eighteen at a time, have found in it ample room for sleeping. As it is the best example of its type that has been discovered, it was deemed best both to put it in condition to prevent further deterioration and to restore it as an example of this form of sanctuary. Accordingly, the floor was cleared, and the vestiges of the rows of loops described in connection with the Snake kiva were discovered; also the remains of the fire-pit, or sipapu. The position of the altar is determinable, as is also that of the ceremonial entrance and main doorway. The restoration of these features was therefore planned and the work commenced. Time did not permit of its completion. It will be finished at the beginning of next season's work.

THE GREAT CEREMONIAL CAVE

The most picturesque object to be studied thus far in the Rito de los Frijoles is the great ceremonial cave mentioned in the report of the excavations of 1908. This cave is situated at the upper end of the formerly inhabited part of the Rito, and about two hundred yards above the western end of group *A*. It does not, however,

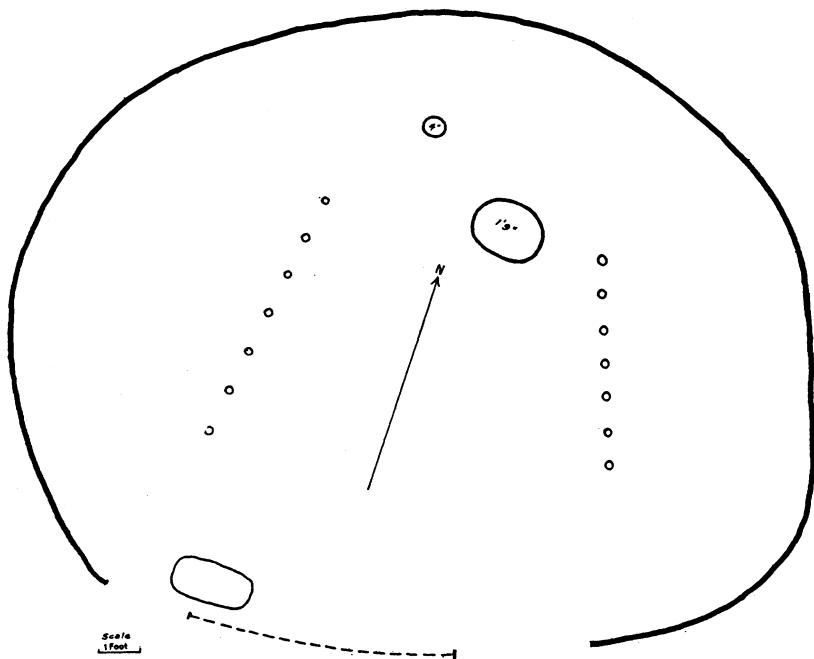


FIG. 115. — Ground-plan of the large cave kiva.

mark the upper limit of occupancy; straggling cave ruins are found several hundred yards farther west. On the bench across the creek, directly south, is the ruin of a small pueblo to which, following Bandelier, has been given the name of the house of the Water People. The great cave (see fig. 91 of our previous report) is 150 feet above the water of the creek. Mr Nusbaum has made it accessible by the building of about 90 feet of ladders and 200 feet of rock trail and stairway. The first ladder, 25 feet in length, is placed at some distance to the left of the cave, and by means of this

a level is reached along which, by the cutting of a trail in the rock, and the building of strong hand-rails and a stairway mounting to a height of another 25 feet, the landing is reached upon which is placed the second ladder. This is 40 feet in length and leads to another landing along which a trail is built to the foot of the upper ladder.

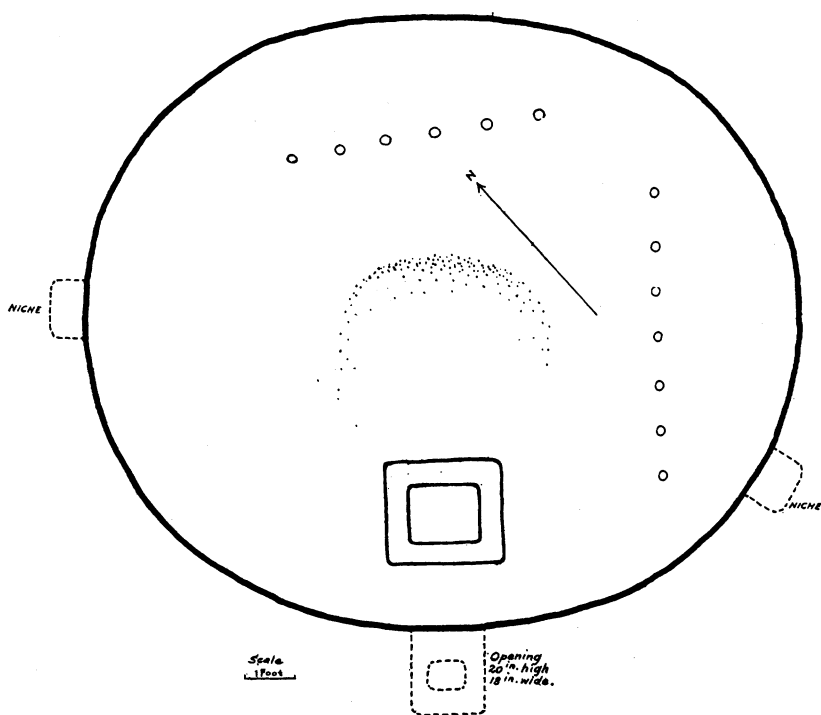


FIG. 116. — Kiva in ceremonial cave, Tyuonyi.

This is 25 feet long and reaches a point from which a path has been constructed to the floor of the cave, 30 feet above.

The buildings which formerly occupied the cavern are entirely destroyed, but their foundations are still to be traced, as is also the imprint of their walls upon the roof of the cave. The excavation of the floor has not yet been undertaken, and when done it is possible that the results now presented may be modified. However, the evidences are fairly distinct and have afforded the basis for Mr Chapman's reconstruction shown in figure 118. The buildings were

constructed of stone, some one and others two stories high, with excavated chambers at the back. The roof of the cave formed the roof of the second story, as shown in the reconstruction. The plan as worked out gives a total of twenty-two rooms in the pueblo occupying the cavern. It seems likely that additional rooms occupied the eastern quarter of the cave, but this remains to be verified by excavation. The restoration here presented (fig. 118) and the ground-plan (fig. 117), being tentative, are subject to alteration and

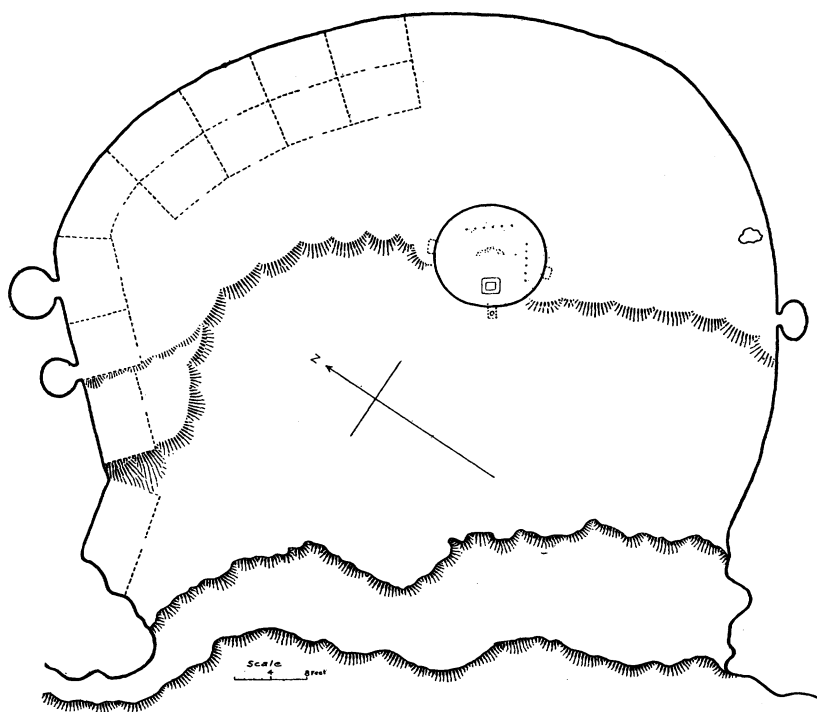


FIG. 117. — Ground-plan of ceremonial cave.

completion as the work is continued. In the floor of the cave is found one of the best preserved and best constructed kivas of the entire region. The excavation of this is referred to in the previous report. Note, in the ground-plan (fig. 116), the position of the ceremonial entrance, the altar, and the row of holes in the floor.

STUDY OF MYTHOLOGY AND LANGUAGE

In the summer of 1908 Mr John P. Harrington, then working as a volunteer assistant, commenced a systematic study of the Tewa language and myths, using for his informants the Indian workmen employed at the excavations. This was continued during the pres-

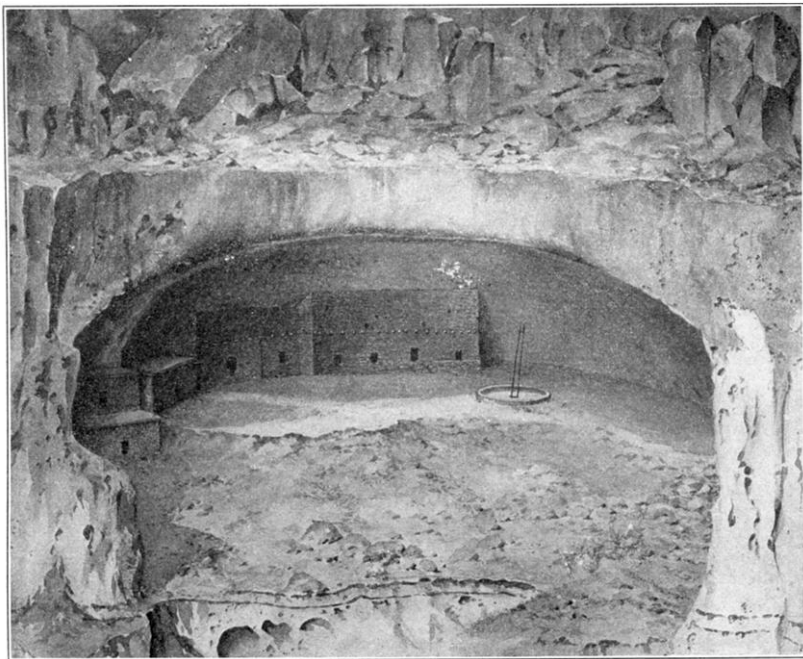


FIG. 118. — The great ceremonial cave, with buildings restored.

ent season. The long-continued and friendly relations existing between the Indians and our field parties have created conditions favorable to the gaining of information which could not be had at the pueblo. As it has been evident that a reëxamination of the languages of the Pueblos was needed, and as the facilities for such study were now at hand, the work was inaugurated.

The Piro and Tano have been examined and reported on,¹ and

¹ *Papers of the School of American Archaeology*, nos. 8 and 12 respectively.

a beginning has been made on the Jemez-Pecos. Some work needed for information on the archeological sites under investigation has been done on the Keres. The obsolete dialects are being properly related to the living languages, and through this medium the ethnology and history of the peoples are being investigated. The study of Tewa geography has been particularly fruitful.

Mr Harrington's linguistic investigations, carried on concurrently with the archeological work, open up new lines of interest and fully justify the establishment of this branch of ethnological research as an auxiliary of archeology. Already the results point to important conclusions concerning the value of tradition. As has been pointed out by the writer in former papers, the Pueblos habitually lay claim to ancient sites as the homes of their ancestors, a frequent reason for this being their desire to establish rights to lands claimed under Spanish grants or under titles still more remote, going back in some instances to divisions that existed in the pre-Spanish period, based on the mutual understandings of neighboring villages, if friendly, or upon the right of the stronger if unfriendly. Such a case is that of the ancient site, the Puye, long claimed by the Tewa of Santa Clara as their ancient home, the error of which has been fully shown.¹ Such claims long maintained, for this or any other reason, finally gained all the weight of established tradition, and are repeated, especially by the younger people, with no thought of untruthfulness. It is interesting to note that while this ancient site was long held to have been their ancestral home, the name *Puye* (Tewa: "Assembling place of rabbits") is admitted to be a modern descriptive term and not claimed by them to have been the archaic name of the community at all. Of this they admit total ignorance, a fact quite inconsistent with the claim that their people came from Puye down to the valley only a short while before the Spanish occupancy.

Equally interesting is the case of El Rito de los Frijoles, as Mr Harrington finds it. The cañon which now bears this name has so been known to the Mexicans for many years, and is so known to the Keres. It has long been claimed as Keres territory by the

¹ *Papers of the School of American Archaeology*, no. 3.

Indians of Cochiti, who also lay claim to the land north of it, between the Rito and the Cañada Ancha, as ancestral ground. They know the Rito as "Tyuonyi," and trace their ancestry in unbroken succession back to this place, yet disclaim knowledge of the meaning of the name. In former years it was given by them as meaning "Place of compact, or treaty making." It would seem that this tradition was not so strong as the tradition of possession, for any Cochiti Indian will immediately give one the tradition of their former occupancy of the Rito. The Tewa hold that Cañada Ancha, known to them as El Rito de los Frijoles, is the true valley of the bean fields, and they give to the Cochiti Rito the name "Puwhige," an obscene name which I strongly suspect to be of modern origin closely connected with a contemptuous idea which they often express touching the morals of the Cochiteños. The Tewa acknowledge the Cochiti tradition of ownership of the Rito, though my first and apparently most trustworthy informant concerning the ancient occupants of the plateau towns, Weyima (Antonio Domingo Peña), Rain Priest at San Ildefonso, would never admit the tradition that ancestors of the Cochiteños, except certain clans, ever lived in the Rito. He always claimed rather minute traditionary knowledge of the ancient peoples of the Pajarito plateau southward to Tchirege on the Pajarito creek, and held that no one living could tell anything of those farther south on Mesa del Pajarito.

Turning to the cultural evidence, it is to be noted that nothing of modern Cochiti is to be seen in the ruins of the Rito except occasional surface potsherds, possibly results of breakage during temporary visits in recent years. No systematic comparison of the cultural material from Puye and the Rito has been made. Superficially no differences are noticeable, such as that prevailing in the pottery of modern Tewa and Keres, or between that of villages of the same stock, as Santa Clara and San Ildefonso, or Cochiti and Santo Domingo. In view of the rather confusing character of the traditionary information, a close comparison of the material found in the excavations at Puye and the Rito, as well as with that from the central group of ruins — Tchirege, Otowi, and Tsankawi — is awaited with much interest. Equally important will be a comparison of skeletal remains from the Rito with the somatic characters

of the modern Keres and Tewa peoples. It is hoped that the excavations of another season will bring to light sufficient material to permit of such study.

It must be admitted that an examination of the migration traditions of Cochiti, as given by Bandelier, Lummis, Harrington, and the writer, at intervals during the last twenty-five years, does not establish confidence in their historical accuracy. The traditions have been given with variations even by the same informant. The invariable element is that the Cochiti people have occupied and abandoned successively, a number of sites, beginning with Tyuonyi and ending with their present village. The number of sites given varies from five to seven. The entire list is as follows:¹

1. *Ty'u'onyi háarctitc*^a (*ty'u'onyi*, unexplained + *háarctitc*^a, houses). The settlement in the Rito de los Frijoles.
2. *Mók'atc qówetc háarctitc*^a (*mók'atc*^a, mountain-lion, + *qówetc*, crouching, + *háarctitc*^a, houses). The Pueblo of the Stone Lions on the Potrero de las Vacas.
3. *K'áthetyam tsitya'tanc, k'a'matse* (*k'áthetyam*^a, cave, + *tsitya'tanc*, painted, + *k'a'matse*, settlement). The settlement at the Painted Cave, in the Cañada de la Questa Colorada.
4. *Ryã'tc k'a'matse crúma* (*ryã'tc*^a, cottontail rabbit, + *k'a'matse*, settlement, + *crúma*, ancient). The pueblo on the Potrero de San Miguel, south of the Cañada de la Questa Colorada.
5. *Qôapa háarctitc*^a (*qôapa*, the Cañada de Cochiti, + *háarctitc*^a, houses). The village in the lower Cañada de Cochiti, below the Potrero de los Idolos.
6. *K'ótyit' háarctitc*^a (*k'ótyit'*, unexplained, + *háarctitc*^a, houses). "Old Cochiti," in the upper Cañada de Cochiti.
7. Cochiti. The present village on the Rio Grande.

An examination of the known facts relative to the six sites antedating the Cochiti of to-day gives the following results:

1. Tyuonyi. The great community house, three small outlying valley pueblos, and the succession of talus villages in the cañon of El Rito de los Frijoles, together with the pueblo ruins on the rim of the mesa south of the Rito, all of which taken together appear to make up the ancient settlement of Tyuonyi, would, if restored,

¹ Etymology by Harrington.

accommodate several communities of the size of Cochiti. Taken in connection with the multitude of "small-house" ruins on the adjacent mesas north and south, all of which may be considered closely related to the main Tyuonyi settlement, we have here a great focus of ancient population from which there might well have been thrown off from time to time clan groups sufficiently numerous to account for a number of Keres villages.

2. The Pueblo of the Stone Lions. This site is a few miles south of Tyuonyi, about three hours' march by the circuitous route that must be taken. It consists of a single great quadrangular community house, or group of houses, with some outlying cliff dwellings. Taking into consideration the closer grouping indicated in the ancient community houses, this may have been a settlement of several hundred people — may have been equal in population to the present Cochiti.

3. The Painted Cave. This is a very short distance to the south from the Pueblo of the Stone Lions — by the route now taken about an hour's march. At this place there was, besides the great ceremonial cave, a small cliff dwelling and talus settlement, corresponding in size to the clan houses of the mesas. It could never have been more than a clan village, never approaching the size necessary to accommodate a large community like Cochiti.

4. Ryätc", or Háats°. This site, to which both the above names have been applied, is on the Mesa de San Miguel, an easy hour's march from La Cueva Pintada. The Cochiteños are not clear in their traditions concerning this settlement, as is shown by the confusion of names. I am of the opinion that these are names belonging to two ruined villages on the same mesa, about a mile apart. Both are small. The first name, *Ryä'tc"*, suggests the probability that this was a settlement of Rabbit clans. The other, *Háats°* (earth) may indicate a settlement of the Earth people. There is nowhere on this mesa any indication of a large aggregation of clans such as exist at the present town of Cochiti.

5. Qóapa. This site is perhaps two hour's march from Ryä'tc", though the air-line distance is very short. It is in the lower Cañada de Cochiti, under the brow of the high mesa known as the Potrero de los Idolos, which takes its name from another ancient shrine,

similar in some respects to the Stone Lions of Potrero de las Vacas. Qóapa is a small ruin having no traditionary name, it being spoken of by the name of the valley (*Qóapa*, Cañada de Cochiti) in which it lies. It was a small place which never could have served as the home of such a community as Cochiti.

6. K'ótyit'. This site is also in Cañada de Cochiti, a few miles above Qóapa. It is the true "Old Cochiti." For this we have traditionary evidence and the firm basis of documentary history. The place is well known to the Cochiteños as their home up to the time of its destruction by the Spaniards. For the authentic history of this period we are indebted to Bandelier.¹ After the destruction of Old K'ótyit' the present pueblo of the same name (now permanently corrupted into "Cochiti") was built on the banks of the Rio Grande. This town has probably nearly held its own in population since the removal. Knowing something of it from the time of the occupancy of old K'ótyit', we have evidence on which to estimate roughly the population of ruined villages from their present appearance.

As a result of this examination of the migration traditions of Cochiti we have the following conclusion: Of the six sites antedating the present Cochiti and claimed by the Cochiteños as their successive homes, in the course of some centuries of wanderings, three, the settlement at the Painted Cave, Ryä'tc^a or Háats^e, and Qóapa, could not possibly have accommodated more than small detachments of such an aggregation of people. They were probably clan villages, and the names Ryä'tc^a and Háats^e afford some confirmation of this. Two of the sites, K'ótyit' and the Pueblo of the Stone Lions, from their size and also other indications, could have been the homes of such a community. That the former was so is established by documentary history. The first of all, Tyú'onyi, the place from which Cochiti migration tradition begins, consists of a group of villages which, taken in connection with the large number of outlying ruins, could have accommodated many times the population of Cochiti.

The conclusions are thus adverse to the historic accuracy of the

¹ *Papers of the Archaeological Institute of America, American Series, Final Report*, part II, by Ad. F. Bandelier.

tradition of successive occupancy and removal from these six ancient sites in a body. It seems more probable that all these settlements contributed groups of population to Old K'ótyit¹, and that we are to see in these, together with the hundreds of other ruins, small and large, lying between Cañada Ancha on the north and Cañada de Cochiti on the south, the remains of ancient communities that contributed to the formation of all the present Rio Grande valley towns of the Keres stock. It must be borne in mind, however, that there is still much archeological work to be done before this can be declared a finally established conclusion.

The scientific force at the Rito excavations this year was in part the same as last year. The writer was personally in charge, and the assistants, besides giving constant aid in the general archeological work, had each some special responsibility. Mr Chapman attended to all map, plan, and restoration work. The reconstruction and photography were in charge of Mr Nusbaum. Mr Harrington's studies pertained principally to the languages and myths. Mr Lotave made the preliminary sketches in oil for the art work which he is now doing in the Rito de los Frijoles room in the Museum in Santa Fé. The excavating force consisted of a number of our Tewa Indians from San Ildefonso, several of whom have developed a skill and interest that make their part in the work a most effective and honorable one.

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